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UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* PERSONALIZED MEDIA COMMUNICATIONS, INC.<sup>1</sup>

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Appeal 2007-4044  
Reexamination Controls 90/006,697 and 90/006,841 (merged)<sup>2</sup>  
Patent 4,704,725<sup>3</sup>  
Technology Center 3900  
and

Appeal 2008-0334  
Reexamination Control 90/006,800<sup>4</sup>  
Patent 4,694,490<sup>5</sup>  
Technology Center 3900

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Decided: June 30, 2008

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<sup>1</sup> Personalized Media Communications, Inc. is the owner of the patent under reexamination. The inventors named in both of the patents are John C. Harvey and James W. Cuddihy.

<sup>2</sup> Hereinafter "the '841 Reexamination proceeding." Both merged reexamination proceedings were initiated at the request of third-party requester Scientific-Atlanta, Inc.

<sup>3</sup> Issued November 3, 1987 (now expired), based on Application 06/829,531, filed February 14, 1986, as a continuation of Application 06/317,510, filed November 3, 1981, which issued as Patent 4,694,490.

<sup>4</sup> Hereinafter "the '800 Reexamination proceeding." Initiated at the request of third-party requester Thomson, Inc.

<sup>5</sup> Issued September 15, 1987 (now expired), based on Application 06/317,510, filed November 3, 1981.

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Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

Before JOHN C. MARTIN, LEE E. BARRETT, and MARK NAGUMO,  
*Administrative Patent Judges.*

MARTIN, *Administrative Patent Judge.*

### DECISION ON APPEAL STATEMENT OF THE CASE

Appellant appeals under 35 U.S.C. §§ 134(b) and 306 from (1) the Final Action rejecting claims 1-5 of Patent 4,704,725, which are all of the patent claims, under 35 U.S.C. § 103(a); and (2) the Final Action rejecting claims 1-9 and 11 of Patent 4,694,490 under § 103(a).<sup>6</sup> The Examiner has confirmed the patentability of claims 10, 12, and 13 of the '490 patent.<sup>7</sup> The two appeals involve similar issues.

Oral argument in both appeals was heard on January 9, 2008.

We have jurisdiction under §§ 134(b) and 306. We AFFIRM.

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<sup>6</sup> The Final Action in the '841 Reexamination proceeding also included (at 47-48) a double patenting rejection of claim 3 of the '725 patent. That rejection has been withdrawn (Advisory Action at 12) in view of the filing of a terminal disclaimer.

<sup>7</sup> '800 Reexamination proceeding, Final Action, Form PTOL-466  
(Continued on next page.)

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*A. Related proceedings*

The Brief<sup>8</sup> identifies (at pages 3-5) a number of allegedly related USPTO, International Trade Commission, and court proceedings, of which the following are relied on by Appellant during these reexamination proceedings.<sup>9</sup>

Both of the patents under reexamination are asserted in *Pegasus Development Corp. and Personalized Media Comm., LLC v. DIRECTV Inc.*, No. CA 00-1020 (GMS) (D. Del. filed Dec. 4, 2000) ("the Delaware Action"), which the Brief indicates (at 4) has been stayed. Patent 4,694,490 (the '490 patent), which is the subject of the '800 Reexamination proceeding, is also asserted in *Personalized Media Communications, LLC v. Scientific-Atlanta, Inc. et al.*, No. 1:02-CV-824 (CAP) (N.D. Ga. filed Mar. 28, 2002) ("the Atlanta Action"), which has also been stayed.<sup>10</sup> Special Masters in both litigations issued the following reports construing the claims: (a) "Special Master's Report And Recommendation on Claim Construction Under Seal" (hereinafter "Atlanta Special Master's Report"); and (b) "Report and

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("Office Action in Ex Parte Reexamination").

<sup>8</sup> Except as otherwise noted, references to the papers filed during the reexamination proceedings are to the papers in the '841 Reexamination proceeding.

<sup>9</sup> Copies of papers from those proceedings were provided as a Related Proceedings Appendix to each Brief.

<sup>10</sup> 841 Reexamination proceeding, Request for Reexamination 6.

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Recommendation Of Special Master Regarding Claim Construction”  
(hereinafter “Delaware Special Master’s Report”).

The Brief also indicates (at 5) that the applications involved in the following appeals are related to the patents involved in these reexamination proceedings:

(1) Application 08/470,571 (Appeal 2007-1837; heard December 5, 2007); and

(2) Application 08/487,526 (Appeal 2007-2115; heard December 5, 2007).

*B. Appellant’s invention*

The claims are directed to methods of communicating data to a multiplicity of receiver stations, such as subscriber stations in a cable TV system.

Appellant and the Examiner agree that a receiver station that functions in the manner required by the claims is depicted in Figure 6C of the ‘725 and ‘490 patents, which is reproduced below.

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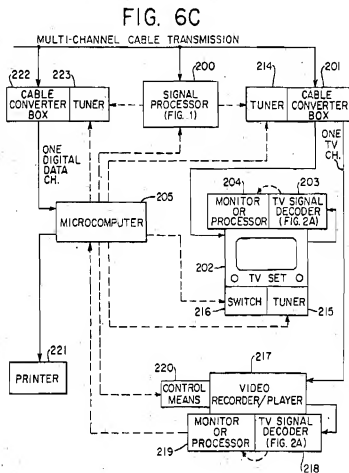


Figure 6C is a block diagram of a signal processor apparatus for organizing the reception of selected information and programming and for coordinating multi-media, multi-channel presentations in time ('725 Specification col. 6, ll. 5-8). The apparatus can be programmed to hold a portfolio of stocks and to receive news about these particular stocks and about the industries they are in (col. 18, ll. 50-53). The relevant news is obtained in the following manner. Several separate news services transmit

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news on different channels carried on the multi-channel cable system, to which are connected to converter boxes 222 and 201 and a signal processor 200 (col. 18, ll. 53-56). The news services precede each news transmission with a signal that uniquely identifies the company or companies and/or industries to which the news item refers (col. 18, ll. 57-60). Microcomputer 205 instructs signal processor 200 to hold examples of the sought-for unique signals in its buffer/comparator 8 and compare them with all incoming signals (col. 18, ll. 60-63). Signal processor 200 sequentially scans all channels and, upon identifying a signal of interest, relays that information and the channel identifier to microcomputer 205 (col. 18, ll. 63-67). Either microcomputer 205 or signal processor 200 instructs tuner 223 to set cable converter box 222 to the proper channel, and microcomputer 200 may record the information in memory or transfer it to a printer 221 for printing (col. 18, l. 67 to col. 19, l. 4).

Appellant and the Examiner agree that the terms “user specific information” and “user specific signals” recited in the claims correspond to the user’s stock portfolio in the following “Wall Street Week” example:

Each weekday, microcomputer, 205, receives, about 4:30 PM, by means of a digital information channel, all closing stock prices applicable that day. It may receive these directly or it may automatically query a data service for them in a predetermined fashion. It records those prices that relate to the stocks in its stored portfolio.

Microcomputer, 205, is preprogramed [sic] to respond in a predetermined fashion to instruction signals embedded in the “Wall Street Week” programing transmission. When the “Wall

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Street Week” transmission begins at 8:30 PM on a Friday evening, several instruction signals are identified by decoder, 203, and transferred to microcomputer, 205. These signals instruct microcomputer, 205, to generate several graphic video overlays, which microcomputer, 205, has the means to generate and transmit and TV set, 202, has the means to receive and display, and to transmit these overlays to TV set, 202, upon command. Subsequently in the program, the host says, “Here is what the Dow Jones Industrials did i[n] the past week,” and a studio generated graphic is pictured. The host then says, “Here is what the broader NASDAQ index did in the week past,” and a studio generated graphic overlay is displayed on top of the first graphic. Then the host says, “And here is what your portfolio did.” At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205. This signal instructs microcomputer [sic], 205, to transmit the first overla[y] to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks’ performance overlay the studio generated graphic. When the two studio generated graphics are no longer displayed, the studio stops sending the instruction signal, and the microcomputer 205, ceases transmitting its own graphic to TV set, 202, and prepares to send the next locally generated graphic overlay upon instruction from the originating studio.

Col. 19, l. 40 to col. 20, l. 12 (boldfacing of reference numerals omitted).

### *C. The claims*

The ‘725 patent includes independent claims 1 and 3. Claim 3, the broader claim, reads:

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3. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the *user specific signals* transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of:

transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device,

detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and

causing said last named computers to generate and transmit their *user specific signals* to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices *an output signal comprising* said data and *said related user specific signals*, the output signals at a multiplicity of said output devices being different, *with each output signal specific to a specific user.*

'725 patent, cols. 23-24 (indentation modified; disputed limitations italicized).

The '490 patent includes independent claims 1, 4, 7, and 9, which more specifically recite using the computers at the receiver stations to generate and transmit "overlay signals" that cause "user specific information" to be displayed on "associated television receivers." Claim 1 reads:

1. A method of communicating television program material to a multiplicity of receiver stations each of which

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includes a television receiver and computer, the computers being adapted to generate and transmit overlay signals to their associated television receivers, said *overlay signals causing the display of user specific information* related to said program material, and with at least some of said computers being programmed to process overlay modification control signals so as to modify the overlay signals transmitted to their associated receivers, each of said computers being programmed to accommodate a specific user application, comprising the steps of:

transmitting a video signal containing a television program signal to said receivers,

transmitting an instruct-to-overlay signal to said receiver stations at a time when the corresponding overlay is not being displayed,

receiving said video signal at a plurality of receiver stations and displaying said program material on the video receivers of selected ones of said plurality of receiver stations,

detecting the presence of said instruct-to-overlay signal at said selected receiver stations and coupling said instruct-to-overlay signal to the computers associated with the video receivers of said selected stations, and

causing said last named computers to generate and transmit their overlay signals to their associated television receivers in response to said instruct-to-overlay signal, thereby to present a display at the selected receiver stations including the television program material and the related computer generated overlay, *the overlays displayed at a multiplicity of said receiver stations being different, with each display specific to a specific user.*

‘490 patent, col. 22 (indentation modified; disputed limitations italicized).

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Comparing claim 3 of the '725 patent to the Wall Street Week example, the recited "multiplicity of receiver stations" corresponds to a plurality of receivers of the type depicted in Figure 6C. Appellant reads the recited "computer" on microcomputer 205 (Br. 9), reads "an output device" on TV set 202 (*id.*), and reads "user specific signals" on the overlay signals that represent the performance of the user's own stock portfolio (*id.*).

Appellant reads the "instruct-to-transmit signal" on the transmitted instructions that (1) cause microcomputer 205 to generate the graphic overlay information that represents the performance of the subscriber's stock portfolio and (2) subsequently cause microcomputer 205 to transmit that graphic overlay information to the TV set for display along with the two studio-generated graphics (*id.*).<sup>11</sup>

#### *D. The references and rejection*

The references cited in the statement of the rejections are:

Tsuboka et al. (Tsuboka) JP 55045248 Mar. 29, 1980<sup>12</sup>

B. Marti, *Broadcast Text Information in France*, Viewdata '80, March 1980, pp. 359-69 (Marti).<sup>13</sup>

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<sup>11</sup> Claim 1 of the '725 patent more specifically recites an "instruct-to-process signal" and an "instruct-to-output signal."

<sup>12</sup> Answer, Attach. 3.

<sup>13</sup> Answer, Attach. 2. Marti is thus identified at page 58 of Appellants' February 2, 2004, Information Disclosure Statement (IDS).

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CBS “Petition for Rulemaking,” filed with the Federal Communications Commission (FCC) on or about July 29, 1980 (CBS Petition papers).<sup>14</sup>

The CBS Petition papers on which the Examiner relies (i.e., Attachment 1 to the Answer) consist of five documents: a CBS cover letter addressed to FCC Secretary William J. Tricarico; the fifteen-page CBS Petition; Exhibits I and II to the CBS Petition; and Appendix B to Exhibit II.<sup>15</sup> As explained *infra*, the copy of the CBS Petition papers relied on by the Examiner was obtained from the files of the FCC. An identical copy of these documents has also been provided as Exhibits B and C to the Declaration of Kimberly Kellmel, who personally reviewed the FCC files on behalf of Appellant in June 2006. Kellmel Decl. paras. 8-16.<sup>16</sup>

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<sup>14</sup> Answer, Attach. 1.

<sup>15</sup> Appendix A is not relied on by the Examiner.

<sup>16</sup> The copy of Exhibit II that accompanied the Answer is missing pages 3 and 4. Also, in Exhibit C to the Kellmel Declaration, page 11 of Exhibit II is separated from pages 12-20 by the first fourteen pages of a document entitled “Teletext Field Tests – Phase II” (presumably part of Appendix A to Exhibit II). A complete and uninterrupted copy of Exhibit II (excluding appendices) has been provided as Appendix III to the Advisory Action.

The record also contains a copy of the CBS Petition, Exhibits I and II, and Appendix B that were not obtained from the FCC files and are not relied on by the Examiner or Appellant. That copy, which is stamped “Telecommunications Information Center” and “GELMAN LIBRARY . . . GWU,” was submitted as Exhibit F14 to the Request for Reexamination in the ‘800 Reexamination Proceeding, wherein it is briefly discussed at page 63, note 18.

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All of the appealed claims stand rejected under 35 U.S.C. § 103(a) for obviousness over the CBS Petition papers in view of either one of Tsuboka and Marti (Final Action 40, 44-46).

### THE ISSUES

Generally speaking, the issue is whether Appellants have shown reversible error by the Examiner in maintaining the rejections. *See In re Kahn*, 441 F.3d 977, 985-86 (Fed. Cir. 2006) (“On appeal to the Board, an applicant can overcome a rejection by showing insufficient evidence of *prima facie* obviousness or by rebutting the *prima facie* case with evidence of secondary indicia of nonobviousness.”) (quoting *In re Rouffet*, 149 F.3d 1350, 1355 (Fed. Cir. 1998)).

The primary question before us is whether Appellant has shown reversible error by the Examiner in finding that Appendix B is available under 35 U.S.C. § 102 as a printed publication with respect to the appealed claims, which have an actual filing date (in the case of the ‘490 patent claims) or an effective filing date (in the case of the ‘725 patent claims) of November 3, 1981.

Appellant also contends that the Examiner erred in construing the “user specific” terminology as broad enough to read on the Mode 2 captioning described in Appendix B.

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## ANALYSIS OF WHETHER APPENDIX B IS A PRIOR ART “PRINTED PUBLICATION”

### *A. Principles of Law*

The standard of proof required to show unpatentability over prior art during a reexamination proceeding is proof by a preponderance of the evidence:

In a reexamination proceeding . . . there is no presumption of validity and the “focus” of the reexamination “returns essentially to that present in an initial examination,” *In re Etter*, 756 F.2d [852,] 857 [(Fed. Cir. 1985) (*en banc*)], at which a preponderance of the evidence must show nonpatentability before the PTO may reject the claims of a patent application. *In re Caveney*, 761 F.2d 671, 674 . . . (Fed. Cir. 1985).

*Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988). A preponderance of the evidence is evidence sufficient to persuade the finder of fact that the existence of an asserted fact is more probable than its nonexistence. *Bosies v. Benedict*, 27 F.3d 539, 542 (Fed. Cir. 1994).

Whether a given reference is a “printed publication” depends on whether it was “publicly accessible” during the prior period. *Bruckelmyer v. Ground Heaters, Inc.*, 445 F.3d 1374, 1378 (Fed. Cir. 2006). A given reference is “publicly accessible”

upon a satisfactory showing that such document has been disseminated or otherwise made available to the extent that persons interested and ordinarily skilled in the subject matter or art exercising reasonable diligence, can locate it and recognize

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and comprehend therefrom the essentials of the claimed invention without need of further research or experimentation.

*Id.* (quoting *In re Wyer*, 65 F.2d 221, 226 (CCPA 1981)).

The Examiner found that all of the CBS Petition papers were filed with the FCC as a single submission on July 29, 1980, and were accessible to the public no later than August 13, 1980, more than one year prior to Appellant's November 3, 1981, filing date, with the result that the CBS Petition papers constitute a printed publication under 35 U.S.C. § 102(b) against the patent claims. Appellant disputes this finding with respect to Exhibit II in general and Appendix B in particular.

*B. The CBS Petition papers*

*1. The Tricarico cover letter*

The cover letter to Secretary Tricarico, which is on CBS stationary and signed by "Michael Rose, Attorney," bears a typewritten date of July 28, 1980, and includes the handwritten notation "RM - 3727" and a "Received" date stamp that reads as follows:<sup>17</sup>

RECEIVED  
JUL 29 1980  
F.C.C.  
OFFICE OF THE SECRETARY.

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<sup>17</sup> Although, as noted by the Examiner (e.g., Supplemental Answer 11), this cover letter and other documents in the CBS Petition papers are stamped "Original File," the significance of that term is not addressed by the evidence of record.

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The cover letter explains that it is accompanied by an original and eleven copies of a Petition for Rulemaking to amend Part 73, Subpart E of the Rules Covering Television Broadcast Stations to Authorize Teletext.

## *2. The CBS Petition*

The second document is the fifteen-page CBS Petition, of which the first page includes the handwritten notation “RM - 3727” and has been stamped several times with the FCC July 29, 1980, “Received” stamp. The CBS Petition explains that the following documents are “attached”: (i) an Exhibit I describing proposed amendments to FCC rules set forth in §§ 73.681, 73.682(a), and 73.699<sup>18</sup> (CBS Petition 3, para. A); and (ii) an Exhibit II in the form of an Engineering Statement (CBS Petition 3, para. C).<sup>19</sup>

## *3. Exhibit I*

The third document, entitled “Exhibit I, Proposed Rules,” consists of two pages of text and one page of drawings. This exhibit includes no typewritten date, “Received” date stamp, or “RM - 3727” notation.

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<sup>18</sup> The FCC rules are in Title 47 of the Code of Federal Regulations.

<sup>19</sup> The last page of the CBS Petition bears the handwritten date of July 29, 1980, and the signatures of Eleanor S. Applewhaite, Mark W. Johnson, and Michael Rose. The record before us contains no testimony by these individuals or any other individuals identified in the CBS Petition papers.

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#### *4. Exhibit II*

The fourth document is entitled "Exhibit II, Engineering Statement in Support of CBS Petition for Rule Making for a Teletext System." The cover page includes a typewritten date of July 21, 1980, and the "RM-3727" notation but no "Received" date stamp. Following the cover page is an unnumbered "contents" page that concludes with the following information:

#### APPENDICES

Appendix A - Reports on the CBS filed tests, Phases 1, 2 and 3.

Appendix B - "Broadcast Teletext System Standard" -- the complete system description.

The contents page is followed by twenty numbered pages of text and drawings.

#### *5. Appendix B ("App. B")*

The cover page of the last document, Appendix B, includes the following heading:

Appendix B  
CBS  
Broadcast Teletext System Standard  
Date: 7/29/80

The cover page includes the "RM - 3727" notation. Neither the cover page nor any other page bears a "Received" date stamp. Page 2, which follows the cover page, provides a Table of Contents. Pages 3-8 consist of a Subject Index, which is followed at numbered pages 9-72 by text. Page 73 is a Table of Figures listing Figures 1-24, which appear on respective pages. The pages

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of figures are followed by an unnumbered page headed "Glossary," which is followed by numbered Glossary pages 2-9.

Of the foregoing documents, the rejection is primarily based on information contained in the CBS Petition and page 72 of Appendix B. Appellant does not deny that the July 29, 1980, "Received" stamps demonstrate that the FCC received the cover letter and CBS Petition on that date. Nor does Appellant deny that the FCC received Exhibit I ("Proposed Rules") on that date, although that exhibit does not bear a "Received" date stamp. To the contrary, citing Ms. Kellmel's testimony about her June 2006 review of the FCC's files, Appellant states that "[i]n the FCC files, the fifteen page CBS Petition is stapled together with a cover letter and the three page Exhibit I." Reply Br. 14.<sup>20</sup>

Regarding Exhibit II and Appendix B, neither of which includes a "Received" stamp, Appellant argues that the evidence of record fails to establish that either document was filed with the CBS Petition or made accessible to the public prior to Appellant's filing date. For the following reasons, a preponderance of the evidence supports the Examiner's finding that Exhibit II and Appendix B were filed together with the CBS Petition on

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<sup>20</sup> Ms. Kellmel testified that the FCC files contain "a document" that "includes" the Tricarico cover letter, the fifteen-page CBS Petition, and "an attached Exhibit titled 'Proposed Rules' consisting of two pages of text and one technical figure." Kellmel Decl. para. 12.

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or about July 29, 1980, and were made available to the interested public more than one year before Appellant's filing date.

That Exhibit II (dated July 21, 1980) was filed together with the CBS Petition is evident from its description in the CBS Petition as attached thereto. See CBS Petition 3, para. C ("As more fully described in the Engineering Statement, attached as Exhibit II . . ."). That Appendix B was filed with Exhibit II and the CBS Petition is apparent from the following facts:

(1) Appendix B bears a typewritten date of "7/29/80," which is the same as the "Received" date of the CBS Petition;

(2) The title given for Appendix B at the second page of Exhibit II matches the title on Appendix B; and

(3) Page 6 of Exhibit II describes Appendix B as included therewith ("For the introduction of teletext in the United States, a modification of the ANTIOPE system is proposed, the detailed coding scheme of which is included herein as Appendix B.").

Furthermore, as explained below, the record of the FCC proceeding shows that Exhibit II and Appendix B were filed along with the CBS Petition on July 29, 1980, and further shows that those papers were accessible to members of the interested public more than one year prior to Appellant's filing date.

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An overview of FCC rulemaking proceedings is provided by the Linthicum article,<sup>21</sup> which explains that

when a petition for rulemaking is received, it is sent to the appropriate bureau(s)/office(s) for evaluation. If a bureau or office decides a particular petition is meritorious, a rulemaking (RM) number is assigned to it. The petition is then made available for public inspection at the FCC Dockets Branch, a part of the Secretary's office. A weekly notice is issued, listing all accepted petitions for rulemaking. Normally, interested parties are invited to comment on the relative merits and demerits of the petition within 30 days following the public notice.

Linthicum article 34, 2d col.

As noted by Appellant (Reply Br. 12), the FCC files reviewed by Ms. Kellmel pertain to rulemaking proceedings RM - 3727 and RM - 3876, which are stored together under docket number BC 81-741 (Kellmel Decl. paras. 6-7).<sup>22</sup> These rulemaking proceedings are discussed in *Proposed Authorization of Transmission Teletext by TV Stations – Proposed Rule*, 46 Fed. Reg. 60,851-59 (Dec. 14, 1981) (“FCC Rulemaking Notice”),<sup>23</sup> which identifies CBS, Inc. as the petitioner in RM - 3727 and the United Kingdom Industry Group as the petitioner in RM - 3876. 46 Fed. Reg. at 60,851, middle col.

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<sup>21</sup> Jack M. Linthicum, *A Guide to the FCC's Rulemaking Procedures*, IEEE Communications Magazine 34-37 (July 1981)(Suppl. Answer, App. 1).

<sup>22</sup> The Kellmel Declaration was filed on June 21, 2006, together with the Reply Brief. The accompanying petition to have declaration considered by the Examiner was granted in a decision dated September 19, 2006.

<sup>23</sup> Final Action, App. I.

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Exhibit A to the Kellmel Declaration includes copies of the FCC docket cards that give the "Received" dates for the papers filed during those proceedings. Each of the first seven sheets of this exhibit, which are unnumbered, shows front or back sides of three different docket cards. Although the docket cards were not copied in date order, it appears that the front side of the first docket card in a rulemaking proceeding includes the "RM" number and a "CARD" number (e.g., "CARD 2"), while the front sides of the remaining docket cards include those numbers as well as a page number (e.g., "Pg. 3"). The only one of these numbers that appears on the back sides of the cards is the page number. Thus, with the exception of the front side of the first card, all of the card sides are numbered in sequence. For example, the front and back sides of CARD 2 are numbered "Pg. 3" and "Pg. 4," and the front and back sides of CARD 3 are numbered "Pg. 5" and "Pg. 6." It is also apparent that the cards for RM - 3727 and RM - 3876 are mixed together in the exhibit.

The front side of the first docket card for RM - 3876 (concerning the petition filed by the United Kingdom Industry Group) appears at the top of the first sheet of Exhibit A. That card side, which is missing the first line of text (presumably "United Kingdom)," is reproduced below.

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This docket card page gives the filing date of the United Kingdom Industry Group petition as March 26, 1981, and its public notice date as April 7, 1981.

RM# 3727 Part 73 CBS, Inc.  
 NYC New York, New York  
 Date Rec'd. *81-741* Nature of Petition  
 7-29-80 - Request amendment of rules governing television broadcast stations to authorize teletext.  
 (Filed by Eleanor S. Applewhite, Mark W. Johnson & Michael Rose, Attys Public Notice Issued: 8-13-80. Ifm  
 8-18-80 - Req. for Ext. of time in which to file comments filed by J. Edward Day, & Philip L. O'Neill, Attys., for Consumer Electronics Group Electronic Industries Association. Ifm  
 8-21-80 - ORDER EXTENDING TIME FOR FILING RESPONSES AND REPLIES TO RESPONSES

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Kellmel Decl., Ex. A at sheet 5 (emphasis added).<sup>24</sup> This docket card identifies CBS, Inc., as the petitioner, gives the received date for the petition as July 29, 1980, and gives the public notice date as August 13, 1980.

Although the text of the FCC public notice is not of record, the above-quoted passage in the Linthicum article indicates that the CBS Petition would have been made available for public inspection at the FCC Dockets Branch within 30 days following the date of the notice.<sup>25</sup> Thus, the public notice was sufficient to advise all members of the public interested in proposals for teletext-type communications in the United States of the relevance of the CBS Petition and the corresponding rulemaking proceeding (RM - 3727).

The record additionally includes evidence that shows actual access to Exhibit II and Appendix B by interested members of the public. Twenty-four parties submitted comments and/or replies in response to the CBS Petition. FCC Rulemaking Notice, 46 Fed. Reg. at 60,857, 1st col. The Examiner relies on several of those submissions.

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<sup>24</sup> The August 13, 1980, public notice date for RM - 3727 is also mentioned in the August 26, 1980, letter from Robert Mann, FCC Director of Public Affairs, to Senator Henry M. Jackson (Suppl. Answer, App. 2).

<sup>25</sup> The Examiner had cited a conversation with an unnamed FCC employee to establish that the CBS Petition papers were made available to the public as of the July 29, 1980, filing date (Final Action 12-13). The Answer explains (at 14-15) that he is no longer relying on that conversation.

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One is the “Comments of GTE Telenet Communications Corporation”<sup>26</sup> (“GTE Comments”), filed in RM - 3727 on October 2, 1980,<sup>27</sup> which includes several references to Exhibit II and Appendix B. First, the comments state that “Appendix B to Exhibit II of the Petition, entitled ‘Broadcast Teletext System Standard’, is an extensive technical discussion of the Antiope system and Exhibit II, itself, presents a ‘Rationale for System Selection’ (page 3), the system being Antiope.” GTE Comments 2. Second, the comments state that “[a]t page 23 of Appendix B of its Petition, CBS expressly recognizes the significance of packet-switched networks to any teletext standardization, and states that its proposal is compatible with the CCITT-recognized X.25 protocol – the standard for the packet network-host computer interface.” *Id.* at 2 n.2. Third, the comments state that “among the parameters contained in the CBS ‘Proposed Standard’ (Appendix B) is an alpha-mosaic standard for the creation of graphics, based on the Antiope system.” *Id.* at 6. These detailed comments demonstrate access to the contents of Exhibit II and Appendix B.

Access to the appendices to the CBS Petition is also specifically mentioned in the “Motion for Leave to File Comments” filed by Subscription

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<sup>26</sup> Suppl. Answer, App. 3.

<sup>27</sup> The date appears on the last page of the GTE Comments and on CARD 2, Page 3 of the RM - 3727 docket cards (Kellmel Decl., Ex. A, fifth sheet).

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Television Association ("STVA Motion")<sup>28</sup> on October 9, 1980,<sup>29</sup> which reads in pertinent part as follows:

The CBS Inc. ("CBS") Petition for Rulemaking, ("Petition"), filed with the Commission on July 29, 1980, sets forth a detailed technical proposal for the establishment of teletext standards for broadcasters. In addition appendices to the Petition contain a complex engineering statement and lengthy technical specifications in support of the proposed standard.

STVA Motion 1.<sup>30</sup>

None of Appellant's reasons why the above evidence fails to establish that Exhibit II and Appendix B were printed publications prior to Appellant's effective filing date are persuasive. The fact that Exhibit II and Appendix B are not listed in the docket cards for RM - 3727 does not tend to prove that those documents were not filed with the CBS Petition. A more logical conclusion, which is consistent with the above evidence, is that those documents were treated as part of the CBS Petition for docketing and date-

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<sup>28</sup> Suppl. Answer, App. 4.

<sup>29</sup> This is the date shown by the FCC "Received" date stamp. The phrase "Subscription Television Assoc." is the first (undated) entry in RM - 3727 docket CARD 4, Page 7 (Kellmel Decl., Ex. A, sixth sheet), on which the next entry is dated "10-10-80."

<sup>30</sup> The Examiner also relies on "Comments in Support of Proposed Rulemaking" submitted on October 2, 1980, by the WGBH Educational Foundation of Boston (Advisory Action 5; Advisory Action, App. XV). These comments do not mention the Exhibit II appendices in general or Appendix B in particular and thus are less probative than the GTE Comments (Continued on next page.)

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stamping purposes. Such treatment would also explain why the copies of Exhibit II and Appendix B found in the FCC docket files have no “Received” date stamps (Kellmel Decl., para. 18). The other information Ms. Kellmel provided about the state of the FCC docket files, i.e., that they include “four boxes of documents arranged in files of approximately 500 pages” (Kellmel Decl. para. 8), that “[t]he boxes contained no index to their contents” and none was provided by FCC personnel (*id.* at 9), that “[t]here is no discernible order or arrangement to the papers in the files or to the files in the boxes” (*id.* at 10), and that the papers are not in chronological order (*id.*), is likewise consistent with a finding that Exhibit II and Appendix B were filed with the CBS Petition.

Appellant, after correctly noting that the GTE Comments and STVA Motion “do not refer to Mode 2 Captioning or to paragraph 7.11.2.2” (Suppl. Reply Br. 8), argues that

[t]hese documents do not establish that the document including paragraph 7.11.2.2 relied upon in the claim rejections was filed with the CBS Petition on July 29, 1980, or was reviewed by either GTE Telenet or to the Subscription Television Association. There is simply no indication that the Appendix B referred to in the GTE Telenet comments is the document relied upon by the Examiner in this proceeding.

*Id.* See also Br. 12 (“The Examiner has failed to establish that the attachment relied upon by the Examiner qualifies as a printed publication under

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or the STVA Motion.

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35 U.S.C. § 102. The relevant attachment appears to have multiple versions . . ."). The argument that Appendix B appears to have had multiple versions has no factual basis whatsoever in the record. As support for this argument, counsel during oral argument pointed out that CARD 4, Page 7 in the fourth sheet of FCC docket cards (Appendix A to the Kellmel Declaration) indicates that corrected copies of Exhibit II were filed on behalf of CBS on August 3, 1981. Hearing Transcript 20:18 to 21:7.<sup>31</sup> That docket card page is reproduced below.

RM-3876	CARD 4	Pg. 7
7-21-81	Reply Comments filed by Eleanor S. Applewhaite & Michael Rose, Attys., for CBS, Inc. ifm 8-3-81 - Corrected copies of Exhibit II filed. ifm	
8-31-81	Comments filed by Robert B. Hansen Senior Vice Pres & Gen Mgr. - Color Television Operations for Zenith Radio Corporation. ifm	
10-22-81	<i>Notice of proposed rule making accepted + 901</i>	

It is evident from the "RM - 3876" notation that the corrected Exhibit II pertains not to the CBS petition (RM - 3727) but to a July 21, 1981, CBS reply concerning the UK Industry Group petition. Also, this reply and the

<sup>31</sup> We have elected to exercise our discretion to consider this argument even though it does not appear in any brief. See 37 C.F.R. § 41.37(c)(1)(vii) ("Any arguments or authorities not included in the brief or a reply brief filed pursuant to § 41.41 will be refused consideration by the Board, unless good cause is shown.").

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corrected Exhibit II therefor were filed long after the October 1980 filing dates of the GTE Comments and STVA Motion in RM - 3727.

Appellant further argues that “[t]here is no evidence that one of ordinary skill exercising reasonable diligence would have been aware of Appendix B” (Reply Br. 12), noting that “the docket cards do not list ‘Appendix B’ or any other teletext specification” (*id.*) and that “the CBS Appendix B is not included in any index or catalogue that would allow one of ordinary skill in the art to locate it.” *Id.* at 13. Appellant’s position appears to be that even if Exhibit II and Appendix B were filed with the CBS Petition, Appendix B was publicly inaccessible because members of the interested public were not specifically made aware of its existence. Such specific identification of Appendix B was not required. The FCC’s public notice was sufficient to direct the attention of any parties interested in the subject of teletext communications in the United States to rulemaking proceeding RM - 3727 in general and the CBS Petition in particular, including the exhibits identified therein and the appendices identified in the exhibits.

Appellant’s argument that “there is no evidence that the material relied upon by the Examiner was accessible to one of ordinary skill outside of CBS and not involved in the FCC proceeding” (Reply Br. 11) is not understood. The FCC’s August 13, 1980, public notice authorized all interested members of the public to review the CBS Petition papers filed with the FCC. The fact that GTE Telenet and others elected to participate in the rulemaking

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proceedings by filing comments or other papers does not detract from their status as interested members of the public.

For the foregoing reasons, a preponderance of the evidence supports the Examiner's finding that Exhibit II and Appendix B were filed with the FCC together with the CBS Petition on July 29, 1980, and were made available to interested members of the public no later than the FCC public notice date of August 13, 1980.

Although it is therefore unnecessary to consider several additional documents cited by the Examiner as proof that Appendix B is a prior printed publication, we will do so in the interest of completeness. The first is a two-page document<sup>32</sup> that purports to be a July 29, 1980, press release by CBS announcing the filing of the CBS Petition, which concludes by stating that "Copies of the CBS filing and engineering statements may obtained from David Fiske, Washington - 202-457-4505 or Dwight Morss, New York -- 212-975-5590." Appellant correctly notes that this document has not been shown to have been actually released to the press (Br. 17).

The second document is an August 1, 1980, memorandum<sup>33</sup> by Edward Merrill of Gallaudet College describing a July 29, 1980, briefing session he attended at CBS's Washington, D.C. office, during which Mr. Merrill heard an explanation of the technical and engineering aspects of the

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<sup>32</sup> Advisory Action, App. V.

<sup>33</sup> Advisory Action, App. VI.

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CBS Petition and received a packet of materials including “the petition for rulemaking which is attached to this memorandum” (Memo. 1) and “the results of the engineering tests and other factual material about Teletext” (*id.*). This document fails to indicate that the packet of materials included Appendix B and thus fails to show that Appendix B was available to the public outside of the FCC proceeding.

#### THE MEANING OF “USER SPECIFIC”

The principal issue raised by the obviousness rejection is whether the terms “user specific information” (recited in the ‘490 claims) and “user specific signals” (recited in the ‘725 claims) are applicable to the Mode 2 captioning described in Appendix B. The Examiner construes “user specific” as broad enough to read any item of information that is “desired/required/selected by a particular user” (Answer 15). Appellant argues that “user specific” means “personal to” a user in a way that requires more than having the user select information that is of interest to a general group of users.

Ordinarily, claims under reexamination are given their broadest reasonable interpretation consistent the patent disclosure. *In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1364 (Fed. Cir. 2004). However, previous panels of this Board have held that

in reexamination proceedings in which the PTO is considering the patentability of claims of an expired patent which are not subject to amendment, a policy of liberal claim construction may properly and should be applied. Such a policy favors a

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construction of a patent claim that will render it valid, i.e., a narrow construction, over a broad construction that would render it invalid.

*Ex parte Bowles*, 23 USPQ2d 1015, 1017 (BPAI 1991) (quoting *Ex parte Papst-Motoren*, 1 USPQ2d 1655, 1656 (BPAI 1986)) (both nonprecedential).

However, this claim construction maxim is limited to resolving ambiguities in a claim:

While we have acknowledged the maxim that claims should be construed to preserve their validity, we have not applied that principle broadly, and we have certainly not endorsed a regime in which validity analysis is a regular component of claim construction. See *Nazomi Communications [Inc. v. ARM Holdings, PLC]*, 403 F.3d [1364,] 1368-69 [(Fed. Cir. 2005)]. Instead, we have limited the maxim to cases in which “the court concludes, after applying all the available tools of claim construction, that the claim is still ambiguous.” *Liebel-Flarsheim [Co. v. Medrad, Inc.]*, 358 F.3d [898,] 911 [(Fed. Cir. 2004)] [other citations omitted].

*Phillips v. AWH Corp.*, 415 F.3d 1303, 1327 (Fed. Cir. 2005) (*en banc*).  
*Accord, Cross Medical Prod. Inc. v. Medtronic Sofamor Danek, Inc.*, 424 F.3d 1293, 1304 (Fed. Cir. 2005). Furthermore, it is improper to use the possible invalidity of the claims, if broadly construed, over the prior art as the reason for construing them narrowly. *The Saunders Group, Inc. v. ComforTrac, Inc.*, 492 F.3d 1326, 1335 (Fed. Cir. 2007) (citing *Liebel-Flarsheim*, 358 F.3d at 911)). Appellant is therefore incorrect to argue that “where two reasonable definitions exist for a claim term, one of which renders the claim valid and other renders the claim invalid, the law is clear

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that the more narrow definition should be applied to an expired patent in reexamination.” Br. 14. We will construe Appellant’s claims in accordance with the foregoing principles.<sup>34</sup>

Appellant correctly argues (Br. 23), and the Examiner agrees (Final Action 9), that “user specific” should be given its ordinary and customary meaning. *See Phillips*, 415 F.3d at 1312 (“We have frequently stated that the words of a claim ‘are generally given their ordinary and customary meaning.’”) (citations omitted).<sup>35</sup>

As support for its interpretation of “user specific,” Appellant relies on the construction of that term given in the two Special Master’s reports. Although the Atlanta Special Master’s Report has been adopted by the Atlanta district court (Br. 13 and 23 & n.4), we are not bound by the court’s adoption of that report. For one thing, the record developed before the court and the record developed in this reexamination proceeding are not identical. *See also Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d at 1369 (“It would be inconsistent with the role assigned to the PTO in issuing a patent to require it to interpret claims in the same manner as judges who, post-issuance, operate under the assumption the patent is valid.”) (quoting *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997)). Nor will we give any weight to the Special

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<sup>34</sup> As noted above, the presumption of validity under 35 U.S.C. § 282 is inapplicable to *ex parte* reexamination proceedings. *Etter*, 756 F.2d at 858-59.

<sup>35</sup> Appellant does not contend that “user specific” is a term of art.

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Masters' interpretations of "user specific," which is not a technical term, scientific term, or term of art. See *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 981 (Fed. Cir. 1995) (en banc) ("[I]t is permissible, and often necessary, to receive expert evidence to ascertain the meaning of a technical or scientific term or term of art so that the court may be aided in understanding . . . what [the instruments] actually say.") (alteration by court), *aff'd*, 517 U.S. 370 (1996). However, because we have been unable to obtain a copy of the '490 patent file, which the USPTO's PALM (Patent Application Location and Monitoring) system indicates has been lost, we will refer to the description of the prosecution history of that patent given at pages 21-114 of the Atlanta Special Master's report, wherein it is referred to as "Harvey I."<sup>36</sup>

#### A. The claims

The claims themselves can provide substantial guidance as to the meaning of particular claim terms. *Phillips*, 415 F.3d at 1314.

Claims 1 and 3 of the '725 patent specify that the "output signals," which include "user specific signals" and "data," are "specific to a specific user." Claims 1, 7, and 9 of the '490 patent similarly specify that each display, which includes television program material as well as an overlay that

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<sup>36</sup> A copy of the relevant papers from the '725 patent file are enclosed with this Decision.

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represents “user specific information,” is “specific to a specific user.”<sup>37</sup> It is therefore clear that “user specific” as used in the above claims would have been understood to mean “relates to a particular user,” a point on which Appellant and the Examiner agree.

Claims 1 and 3 of the ‘725 claims further specify that “the output signals at a multiplicity of said output devices [are] different,” while claims 1, 4, 7, and 9 of the ‘490 claims similarly specify that “the overlays displayed at a multiplicity of said receiver stations [are] different.” These limitations are satisfied so long as at least two receiver stations apply different output signals to their associated outputs, i.e., display different overlays representing “user specific information.”<sup>38</sup>

#### *B. Dictionary definitions*

Because the term “user specific” is not expressly defined in the ‘725 Specification or in the ‘490 Specification,<sup>39</sup> which apart from the claims is virtually identical to the ‘725 Specification, it is permissible to look to dictionary definitions of “user” and “specific,” bearing in mind that “[i]t is

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<sup>37</sup> In contrast, claim 4 of the ‘490 patent, which is discussed separately *infra*, recites that “each display [is] unique to a specific user.”

<sup>38</sup> We note in passing that Appellant does not base its proposed claim interpretation on the “generate and transmit” language employed in the ‘725 claims and the ‘490 claims.

<sup>39</sup> We will accordingly limit our discussion of the Specifications of the two patents to the ‘725 Specification (hereinafter “Specification”).

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well established that dictionary definitions must give way to the meaning imparted by the specification.” *In re Johnston*, 435 F.3d 1381, 1384 (Fed. Cir. 2006).

A “user” is “[o]ne that uses.” *Webster’s II New College Dictionary* (*Webster’s II Dictionary*) 1215 (2001 ed.). Appellant and the Examiner appear to agree that the term “user” as employed in the claims should be understood to be a person, as opposed to a piece of equipment.

Appellant, after quoting (Reply Br. 8) all of the definitions for “specific” given in the *American Heritage Dictionary* 1240 (1979), correctly identifies the most relevant definition as “4. Intended for, applying to, or acting on a particular thing.” Reply Br. 9. The ordinary and customary meaning of “user specific” established by the foregoing dictionary definitions is “intended for or applying to a particular user,” or, in Examiner’s words, “related to a particular user at each receiving location.” See Answer 20 (“If . . . the ‘user specific’ terminology is more broadly construed as being inclusive of information that is simply ‘related to’ a particular user at each receiving location, as is deemed proper by the examiner . . .”).<sup>40</sup>

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<sup>40</sup> The Examiner noted that during the Atlanta litigation the Patent Owner argued that “user specific signals” is broad enough to include “receiver specific signals” (Advisory Action at 4), citing (at 6-8) the Atlanta Special Master’s rejection of the Patent Owner’s argument to that effect (Atlanta Special Master’s report at 125, 128, 129). Appellant responded by asserting that “[it] never took such a position in this reexamination. In fact, appellant has repeatedly stated in this reexamination (and the reexaminations (Continued on next page.)

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Appellant likewise employs this “related to” language in construing “user specific” but argues that it more particularly means “personal to.” *See* Br. 21 (“When the intrinsic evidence -- the claim language, the specification, and the prosecution history -- is considered, it is clear that the term ‘user specific information’ must mean information relating to, or personal to, a particular user.”). For the reasons given below, we agree with Appellant on this point but disagree with Appellant’s further argument that “user specific” excludes information that relates to a general group of users.

### *C. The Specification*

Appellant and the Examiner agree that the claims at issue read on the “Wall Street Week” example in which the receiver station depicted in Figure 6C is used to generate and display computer-generated overlay signals representing the user’s own stock portfolio (‘725 Specification, col. 19, l. 35 to col. 20, l. 15).<sup>41</sup> Citing that example, Appellant argues that

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of the related patents) that the claim term ‘user specific’ is exactly that, specific to a user.” Br. 20 n.1. We are treating the Examiner’s failure to repeat his position in the Answer as a withdrawal of that position. In any event, an estoppel cannot arise from a prior inconsistent argument that was unsuccessful. *Water Tech. Corp. v. Calco, Ltd.*, 850 F.2d 660, 665-66 (Fed. Cir. 1988).

<sup>41</sup> Because the identical discussion of this example appears in the ‘490 Specification (i.e., at column 19, line 30 to column 20, line 11), we will refer to only the ‘725 Specification.

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“user specific” signals are related to a *particular* user (e.g. a signal including information of the user's stock portfolio) as opposed to a general group of users (e.g. signals selected by a user including information related to stock market indices). . . . [T]he Wall Street Week example contradicts the patent examiner's definition because it distinguishes between screens simply selected by a user (a graph of an index) and screens that contain information personal to, i.e., related to, a particular user (the user's stock portfolio).

Reply Br. 7. This characterization of the stock index graphs as “simply selected by a user” and thus distinguishable on that ground from the user's stock portfolio is incorrect because neither index graph is selected by the user; instead, both are displayed under the control of the television studio. See Specification at col. 19, ll. 59-64 (“[T]he host says, ‘Here is what the Dow Jones Industrials did i[n] the past week,’ and a studio generated graphic is pictured. The host then says, ‘Here is what the broader NASDAQ index did in the week past,’ and a studio generated graphic overlay is displayed on top of the first graphic.”).

Appellant further argues that “the Examiner's interpretation that ‘user specific information’ means any information selected by a user reads all meaning out of that language in the claim.” Br. 25. This argument is unconvincing for two reasons. The first is that such an interpretation would not have the effect of reading “user specific” out of the claim, as it would require the existence of *some* type of relationship between the information and the particular user. Without that language, there would be no need for the information or signals to have any relationship whatsoever to the user.

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The second reason is that the Examiner has not construed the term “user specific information” to be broad enough to read on any information that is arbitrarily selected by a user. Instead, the Examiner concluded that a person having ordinary skill in the art would have understood from Appellant’s disclosure as a whole, including the Wall Street Week example, that “user specific” means “desired/required/selected by a particular user” (Answer 15). We understand this to mean that the term “user specific information” reads on any information that, in addition to being selected by the user, reflects something personal about the user, such as property ownership, interests, preferences, or capabilities.

However, we are not persuaded that the artisan would have seen in the Wall Street Week example any restriction on either the type of information that constitutes personal information or the number of users who can consider a specific item of information to be personal. Thus, this is not a case in which the specification “reveal[s] an intentional disclaimer, or disavowal, of claim scope by the inventor.” *Phillips*, 415 F.3d at 1316 (citing *SciMed Life Sys., Inc. v. Advanced Cardiovascular Sys., Inc.*, 242 F.3d 1337, 1343-44 (Fed. Cir. 2001)).

#### *D. The prosecution history*

Assuming for the sake of argument that the claims of an expired patent under reexamination must be construed in light of the prosecution history, the

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prosecution histories of the '725 and '490 patents fail to support Appellant's narrow claim interpretation.

As support for construing "user specific signals" in the '725 patent to mean "personal to" in a way that excludes information available to a large number of users, Appellant cites the July 6, 1987, Amendment Under Rule 312 (Rule 312 Amendment). The Rule 312 Amendment changed "unique" to "specific" in the last clause of claims 18 and 21 of the '531 application (now '725 patent), which issued as patent claims 3 and 1, respectively. '725 patent file, Preliminary Amendment 1-2; and January 2, 1987, Amendment 1-2. Prior to the Rule 312 Amendment, the last clause in each claim read, "with each output signal unique to a specific user."

The remarks that accompanied the Rule 312 Amendment explained that

[t]he foregoing amendments are proposed to correct an inadvertent oversight and to make the claims internally consistent. The language which applicants propose to amend in claims 18 and 21 state that each output signal is "unqiue [sic] to a specific user". However, the preamble of each claim refers to "user specific signals" and the crux of the invention lies in the ability to output signals that are specific (not necessarily "unique" to specific users (subscribers). In other words, it is the fact that the outputs relate specifically to a given user that is important, not whether or not the outputs are "unique". The term "unique" may imply that each output is different which, as was explained in the parent application, is not necessarily the case so long as the outputs are specific to the individual users.

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Rule 312 Amendment 1-2 (quoted in the Reply Brief at 7). Similar remarks accompanied an Amendment changing “unique” to “specific” in claims 18, 21, 24, and 26 in the ‘510 application<sup>42</sup> (Atlanta Special Master’s Report 61), which issued as claims 1, 4, 7, and 9 of the ‘490 patent. *Id.* at 63. Those remarks, which are quoted in the Reply Brief in the ‘800 Reexamination proceeding, note that an item of “user specific information” can be received by “some number of subscribers”:

This change is not intended to affect the scope of the claims but upon review of the application, it was realized that the term “unique” may convey the thought that the invention requires that the display at each of the subscribers must necessarily be different. Although, in the example given, this is typically the case since it is highly unlikely that any two subscribers would have the same stock portfolio, it would appear to be self-evident that the invention would nevertheless apply to a situation where

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<sup>42</sup> While the Reply Brief dates this amendment as February 17, 1987, it is dated as March 6, 1987, at page 61 of the Atlanta Special Master’s Report. That report notes that for some unknown reason the change of “unique” to “specific” is not reflected in issued patent claim 4 (application claim 21), which specifies that “each display [is] unique to a specific user” (and also recites a “unique user application”). Atlanta Special Master’s Report 89. No certificate of correction has ever been filed to correct that error. During the Atlanta litigation, the parties agreed that the term “unique” in claim 4 should be construed to mean “specific.” *Id.* at 89, 113. During the ‘800 Reexamination proceeding, Appellant has neither noted nor separately argued the “unique” terminology in claim 4, instead arguing that “[f]or the reasons set forth above with respect to claim 1, the Examiner has failed to establish a prima facie case of obviousness against claim 4” (Br. 34). We are accordingly treating claim 4 as standing or falling with claim 1.

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*some number of subscribers* had exactly the same portfolio. In that case, the user specific information displayed at the subscriber's television receiver would be the same for each of such subscribers. In that sense, arguably the information might not be "unique" although it would still be "specific."

'800 Reexam., Reply Br. 8 (emphasis added).

While the above-quoted remarks in the two applications make it clear that Appellant considered "unique" to be too narrow a term to define the required relationship between the recited "user specific" information (or signals) and a particular user, they do not suggest that the characterization of a particular item of information (or a particular signal) as "user specific" is dependent on or determined by the number of users to whom it relates.<sup>43</sup> Reading such a restriction from the stock portfolio example into "user specific" therefore would amount to importing a limitation from the Specification into the claims. *See Phillips*, 415 F.3d at 1323 ("[W]e have expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment."). In light of that principle, Appellant is mistaken to criticize the Examiner for failing to "identif[y] any embodiment disclosed in the '725 patent specification that supports his overly broad interpretation." Reply Br. 7.

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*E. Conclusion*

The term “user specific” is broad enough to read on any information (or signal) that reflects something personal about a particular user, such as property ownership, interests, preferences, or capabilities, and implies no restriction on the number of users to whom the information (or signal) can be considered to be personal.

THE OBVIOUSNESS REJECTION

All of the appealed claims stand rejected under 35 U.S.C. § 103(a) for obviousness over the CBS Petition papers (specifically the Mode 2 captioning described in Appendix B) in view of Tsuboka or Marti, which are relied on “to illustrate the fact that software/computer implemented teletext decoder design, i.e. of the type that is obviously required by the CBS teletext system, was notoriously well known to those of ordinary skill in the art at the time of the invention.” Final Action 41. Appellant does not take issue with the Examiner’s reliance on Tsuboka or Marti for that teaching. Nor does Appellant dispute the Examiner’s statement that that “ANTIOPE-based teletext systems, such as that proposed in the CBS petition, required microprocessor-based teletext decoders to perform the decoding/translation process and, thereby, the captions/overlays generated therein are inherently ‘computer generated’ ones.” Final Action 7 n.1.

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<sup>43</sup> Nor do the remarks explain how such a determination is to be made.

Appeals 2007-4044 and 2008-0334  
Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

*A. Whether Mode 2 captioning constitutes "user specific information"*

The purpose of the CBS Petition was to obtain an amendment of FCC rules (specifically, §§ 73.681, 73.682(a), and 73.699), CBS Petition 3, to "allow television broadcast licensees to transmit teletext." *Id.* at 1. When the CBS Petition was filed, teletext systems were already in use on a regular or pilot basis in England, Australia, France, Canada, Sweden, Japan, and West Germany. *Id.* at 7. As explained in the CBS Petition:

Teletext is the generic term for systems that transmit alphanumeric information (letters, numbers, characters) to the home television receiver. The information is sent by special data signals transmitted simultaneously with the normal television picture or in lieu of picture information. Equipped with a special decoder, a television receiver can extract and translate that information to appear as letters, numbers and graphics on the television screen. Thus, the viewer has access to an electronic "magazine." With the use of a hand-held control unit, much like a small calculator, the viewer can select from hundreds of "pages" of teletext information. Teletext is an interrogative service. Viewers can request any page at any time in any sequence, and the page stays on the screen as long as the user wants.

*Id.* at 2.

The 525-line, 60-field, NTSC<sup>44</sup> analog television signal currently in use in the United States includes certain lines in the field-blanking interval to allow the receiver to synchronize and field retrace before the active video picture begins. App. B at 12. The CBS Petition proposed to permit teletext

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<sup>44</sup> National Television Standards Committee.

Appeals 2007-4044 and 2008-0334  
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and Reexamination Control 90/006,800

information to be transmitted using specific scanning lines in the vertical blanking interval ("VBI") or, on a full field basis, using any or all active picture scanning lines (CBS Petition 2) of which the rejection is based on the VBI implementation (Answer 5). The vertical blanking interval, shown in Figure 1 (App. B, unnumbered page following 73), includes lines 1-21, which contain the vertical synchronizing pulses (lines 1-9) and may contain such signals as: a multiburst test signal (line 17, field 1); a color bar test signal (line 17, field 2); composite test signal (line 18, fields 1 and 2); and digital data signals. *Id.* at 12. Vertical blanking interval (VBI) data transmission is defined as any digitally coded information inserted between lines 10-21 (fields 1 and 2) of the analog television signal. *Id.*

Appendix B states that teletext can be used to provide exceptionally efficient captioning for the hearing impaired community. App. B at 6. Two types of captioning are disclosed, Mode 1 and Mode 2, of which the Examiner relies on Mode 2, described in Appendix B in relevant part as follows:

#### 7.11.2.2 Mode 2 Captioning

When many captions are sent, at various levels and in various languages, forming classes, all varieties for a given class of captions are sent far enough ahead to allow the decoder to store the one selected.

Appendix B at 72. The Examiner found that a displayed Mode 2 caption is "personal to" the user because it reflects the user's personal language capabilities:

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Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

The examiner points out that "mode 2" captioning does not simply comprise information that is specified by each user. Indeed, the information that is specified by each user is in fact specified because it "relates" to the particular user. Specifically, "mode 2" captioning functions to transmit many versions of closed-captioning for a given TV program wherein each version represents a respective "class" of captioning - a respective language and level of captioning. This feature allows a particular user at each user station to select and display the version of closed-captioning that is appropriate to that user's *personal* needs; i.e., the class of captioning that is "specific" to that particular user's *personal* language and level capabilities.

Answer 16 (emphasis added).<sup>45</sup>

Appellant's argument that "French subtitles are not related to a particular user, but rather are related to numerous viewers" (Br. 31) improperly reads a limitation from the Wall Street Week example of a stock portfolio into the claims. For the reasons given above, the artisan would have understood "user specific" to mean personal to the user without placing any limit on the nature type of the personal information or the number of users for whom it can be characterized as personal. Nor is it clear exactly what type of further restriction on "personal to" is being urged by Appellant.

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<sup>45</sup> The Examiner elsewhere stated that "[i]f 'user specific' is narrowly construed as being limited to information that is personal and/or private to each particular user as argued by the Patent Owner, then the examiner agrees that the claims avoid the applied prior art" (Answer 20). In view of the Examiner's above-quoted characterization of a user's language choice for a caption as "personal" to the user, the Examiner apparently was giving the term "personal" a meaning akin to "private" in the page 20 sentence.

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Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

Appellant has not explained why the “personal to” label applies to a user’s stock portfolio, which reflects the user’s stock preferences, but not to the user’s choice of language for Mode 2 captions, which reflects the user’s language preferences and/or skills. Furthermore, if the size of the group of users to whom a given item of information relates is determinative, how is the artisan to determine how many users can have an interest in a particular item of information item without jeopardizing its status as “user specific”?

For the foregoing reasons, we agree with the Examiner that Mode 2 captions constitute “user specific information” (claims 1, 4, 7, and 9 of the ‘490 patent) and that Mode 2 captions are generated in response to “user specific signals” (claims 1 and 3 of the ‘725 patent).

Because the only language of claims 1 and 3 of the ‘725 patent that is specifically argued is the above-discussed language requiring user specificity, we are affirming the obviousness rejection with respect to those claims.<sup>46</sup>

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<sup>46</sup> The Brief, in arguing (at 32) the merits of claim 1 of the ‘725 patent, incorrectly quotes the initial language in the last step of the claim to read: “causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-output signal . . . .” The correct claim language, which is not argued by Appellant, reads: “causing said last named computers simultaneously to output their user specific signals to their associated output devices in  
(Continued on next page.)

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and Reexamination Control 90/006,800

*B. The other '725 patent claims*

Claims 2 and 4 of '725 patent are directed to use of the "modification control signal" initially recited in parent claims 1 and 3, which specify that "at least some of said computers [are] programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices." Claims 2 and 4 each recite, as an additional step, "the step of transmitting a modification control signal to the computers which are programmed to process modification control signals."

The Specification does not use the terms "modify" or "modification control" in the description of the Wall Street Week example. Nor does the Brief explain what it means to "modify the user specific signals" or how that language reads on the Wall Street Week example. The broadest definition of "modify" in the *Webster's II Dictionary* (at 704) is: "1. To change in form or character ; ALTER. . . ."

Appendix B describes control of the display of Mode 2 captions as follows:

7.11.2.2 Mode 2 Captioning

When many captions are sent, at various levels and in various languages, forming classes, all the varieties for a given class of captions are sent far enough ahead to allow the decoder to store the one selected. The Y caption flag (Y1<sub>3</sub> b6 = 1) is raised on each one, implying transparent background and suppress page display. The conceal flag (Y1<sub>3</sub> b8 = 1) should be raised. After all varieties of a given caption are sent, one

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response to said instruct-to-output signal . . . ."

Appeals 2007-4044 and 2008-0334

Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

additional record is sent with the conceal flag low [(equal reveal)  $Y1_3 \text{ b8} = 0$ ]. This single command causes all decoders which have been storing a class of captions to display it. This last command is seen by all decoders, regardless of what page number they have been instructed to look for because this page has no number and has the alarm flag raised in the Y's ( $Y1_1 \text{ b8} = 1$ ).

#### 7.11.2.3 Caption Removal

To remove a class of captions and leave a blank screen, an alarm page is sent with the conceal flag raised, ( $Y1_3 \text{ b8} = 1$ ). This method is effective for either type of caption.

App. B at 72.<sup>47</sup>

The Examiner construes the term "modification control signal" as broad enough to read on either one of (1) the signal that causes the computer to cease transmitting a "user specific signal" to the associated output device and (2) the signal that causes the first "user specific signal" to be replaced by a different "user specific signal":

A) In "MODE 2" captioning, and [sic] "alarm page" is sent to modify (i.e. erase) the locally generated caption image currently being outputted for display by the computer in preparation for the receipt and display of the next caption page [NOTE: the discussion under section 7.11.2.3 of the CBS teletext specification]. This signal corresponds to the recited "overlay modification signal" of claim 2;

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<sup>47</sup> The flags mentioned in the foregoing passage are part of the header of a record that also includes the data field identifying the characters to be displayed. App. B at 41-47 & Figs. 22, 23. This record is sent during the vertical blanking interval. App. B at 12.

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B) Alternatively, the data pertaining to the next caption also causes the "computer" at each receiver station to modify the overlay image that is generated and outputted thereat.

Final Action 44 (bracketed text in original).

Appellant responded to alternative A by questioning whether terminating the display of a caption constitutes "modification" of the caption:

The Examiner asserts that "the deletion of an overlay signal in response to an 'alarm page' signal [sic] a form of 'modification.'" (Advisory Action, p. 12.) The Examiner does not explain how an overlay signal is modified.

'800 Reexam., Br. 33. This argument fails to explain why the Examiner erred in construing "modify" as used in the claims as broad enough to read on terminating the display of a caption.

Assuming for the sake of argument that "modify" is not that broad, Appellant does not deny that it reads on replacing a first displayed caption with a second displayed caption, i.e., Examiner's Alternative B position. Instead, Appellant argues that Mode 2 captions do not constitute "user specific" information. See Br. 32 ("[T]he Final Office Action fails to demonstrate that any teletext captioning data is used to modify a user specific signal as this term is used in the claims."). This argument is unconvincing for the reasons given above in the discussion of claims 1 and 3.

The rejection is therefore affirmed with respect to claims 2 and 4 of the '725 patent.

Claim 5 of the '725 patent, which is multiply dependent on claims 3 and 4, specifies that "said last named computers simultaneously start and stop

Appeals 2007-4044 and 2008-0334  
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and Reexamination Control 90/006,800

the transmission of their user specific signals to their associated output devices.” Appellant argues that

[t]he Final Office Action is silent regarding this limitation. The Final Office Action thus does not establish a prima facie case of obviousness against claim 5. The applied art does not show or suggest user specific signals and, thus, does not show or suggest simultaneously starting and stopping the transmission of user specific signals.

Br. 32. The first two sentences of the above argument are incorrect. While it is true that the Examiner did not discuss the language of that claim, he did state that claim 5 reads on the same subject matter as claim 4 (Final Action 44), which was sufficient to shift the burden to Appellant to explain why the claim 5 language does not read on that subject matter. The last sentence of the above argument is unpersuasive because Mode 2 captions represent “user specific” information and thus are generated in response to user specific signals.<sup>48</sup> The rejection of claim 5 is therefore affirmed.

In summary, the obviousness rejection is affirmed with respect to claims 1-5 of the ‘725 patent.

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<sup>48</sup> Appellant does not argue the “simultaneously start and stop” language of claim 5 separately from the “user specific” language.

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Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

*C. The '490 patent claims*<sup>49</sup>

The recited “overlay signals causing the display of user specific information relating to said program material” read on the signals that cause the television receiver to display Mode 2 captions in the language selected by the user. As this is the only language of independent claims 1, 4, 7, and 9 that is argued by Appellant, we affirm the rejection of those claims.

We note in passing that the Examiner reads the recited “instruct-to-overlay signal” for causing the computers to generate and transmit overlay signals (claims 1, 4, 7, and 9) on the “reveal” signal (Answer 9, last four paras.).

Claim 2, which depends on claim 1, is similar to claims 2 and 4 of the ‘725 patent in that it calls for “transmitting an overlay modification signal to the computers which are programmed to process overlay modification signals, and causing said last named computers to modify their respective overlay signals in response thereto.” The Examiner reads this claim on the same two alternatives that he relied on to reject claims 2 and 4 of the ‘725 application. Specifically, the first alternative is stated at page 38 of the Final Action, and both alternatives are mentioned in the following passage in the Advisory Action: “The examiner maintains that the deletion of an overlay signal in response to an ‘alarm page’ signal a form of ‘modification’. The examiner also notes that the deletion of one overlay signal is for the purpose

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<sup>49</sup> Our discussion of these claims refers to the papers in the ‘800  
(Continued on next page.)

Appeals 2007-4044 and 2008-0334  
Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

of enabling it to be replace[d] (i.e. modified) by a next overlay signal.”

Advisory Action 12.

Appellant responded to only the first alternative (Br. 33), which response is unconvincing for the reasons given above in the discussion of claims 2 and 4 of the ‘725 patent. The rejection is therefore affirmed with respect to claim 2 and also with respect to claims 5 and 8, which recite similar limitations and depend on claims 4 and 7, respectively.

Claim 3, which depends on claim 1, specifies that “said instruct-to-overlay signal is embedded in said video signal outside the range of the television picture.” In discussing the rejection of claims 1 and 3 (which the Examiner grouped together), the Examiner noted that the CBS Petition proposed to transmit the teletext information in the “VBI” (i.e., vertical blanking interval) (Answer 6), which is outside the range of the television picture. App. B at 12. As already noted in the above discussion of claim 3, the Examiner reads the recited “instruct-to-overlay signal” on the “reveal” signal (Answer 9, last four paras.). Appellant is therefore incorrect to argue that “[t]he Final Office Action is silent regarding this limitation” (Br. 33) and that “[t]he Examiner does not identify an instruct-to-overlay signal embedded in a video signal outside the range of the television picture.” *Id.* The Reply Brief does not address the Examiner’s reliance on the “reveal” signal.

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Reexamination proceeding.

Appeals 2007-4044 and 2008-0334  
Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

The rejection is therefore affirmed with respect to claim 3 and also with respect to claim 6, which recites a similar limitation and depends on claim 4.

Claim 11, which depends on claim 9, recites “means coupled to said computer means for selectively updating said overlay signals.” Although the Final Action does not specifically address this limitation, the Answer notes that the Glossary at the end of Appendix B includes the following entry:

UPDATE MESSAGE - A record or page that replaces the previous message with the same address. It is established when  
Y1<sub>1</sub> b2 = 1.

App. B, Glossary 9. Consequently, we are not persuaded by Appellant’s argument that “[t]he Examiner does not identify means for selectively updating the overlay signals” and that therefore “the Office Action fails to establish a prima facie case of obviousness against claim 11.” Br. 36. The Reply Brief does not address the Examiner’s reliance on the “update message.” The rejection of claim 11 is therefore affirmed.

#### DECISION

The Examiner’s rejection of claims 1-5 of Patent 4,704,725 under 35 U.S.C. § 103(a) for obviousness over the CBS Petition papers in view of either of Marti and Tsuboka is affirmed.

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Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

The Examiner's rejection of claims 1-9 and 11 of Patent 4,690,490 under § 103(a) for obviousness over the CBS Petition papers in view of either of Marti and Tsuboka is likewise affirmed.

The Examiner's decision that claims 1-5 of Patent 4,704,725 and claims 1-9 and 11 of Patent 4,690,490 are unpatentable is affirmed.

No time period for taking any subsequent action in connection with these appeals may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R. §§ 41.50(f) and 41.52(b).

AFFIRMED

qsg

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Appeals 2007-4044 and 2008-0334  
Reexamination Controls 90/006,697 and 90/006,841 (merged);  
and Reexamination Control 90/006,800

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Enclosures: The following papers from the file of U.S. Patent 4,704,725:

- (a) Preliminary Amendment;
- (b) January 2, 1987, Amendment; and
- (c) Amendment Under Rule 312.

4185/12251  
829531  
14-1-86-86

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

JOHN C. HARVEY ET AL.

Serial No.: Not yet known

Filed: February 14, 1986

For: SIGNAL PROCESSING APPARATUS  
AND METHODS

February 14, 1986

PRELIMINARY AMENDMENT

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

Prior to examining the above-identified patent application, please enter the following amendments:

In the Claims:

~~Cancel claims 1-17 and add the following claims:~~

316. A method of communicating data to a multiplicity of receiver stations each of which includes a computer adapted to generate and transmit user specific signals to one or more associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of:

P1 transmitting an instruct-to-transmit signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device,  
11 detecting the presence of said instruct-to-transmit signal at selected receiver stations and coupling said instruct-to-transmit signal to the computers associated with said selected stations, and

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RECEIVED 14 FEB 1986  
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A hereby certify that, on the day of the month of February, 1986, I have received for the Office of Patents and Trademarks, Washington, D.C. 20231, by Express Mail from John C. Harvey, et al., the following:

WILLIAM CROWE KELLEY, Clerk

Name (Print)

causing said last named computers to generate and transmit their user specific signals to their associated output devices in response to said instruct-to-transmit signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal <sup>specific</sup> unique to a specific user.

3/  
425. A method according to claim 14, further including the step of transmitting a modification control signal to the computers which are programmed to process modification control signals, and causing said last named computers to modify their respective user specific signals in response thereto.

REMARKS

By the present amendment all of the present claims, i.e., claims 1-17, are being cancelled. New claims 17 and 18 are being added to this application. These claims are believed to be patentable over the prior art of record in the parent application. Therefore, these claims should be allowed and the application issued as a patent.

Respectfully submitted,

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4135/12251

C. Cofew  
2-2-87IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Paper No. 5

JOHN C. HARVEY, et al.

Art Unit 222

Serial No. 829,531

Filed: February 14, 1986

Examined  
S. CangelosiFor: SIGNAL PROCESSING  
APPARATUS AND METHODS

JAN 21 1987

GROUP 220

December 29, 1986

CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to Commissioner of Patents and Trademarks, Washington, D.C. 20231, on December 29, 1986 (Date of Deposit)

Hon. Commissioner of Patents  
and Trademarks  
Washington, D.C. 20231AMENDMENT6-27-86 *Thaddeus Bulley*  
Date Signature

S i r :

In response to the Official Action dated June 27, 1986,  
please amend the above-referenced application as follows.

In the Claims:

Please add the following claims:

20. A method according to claims 18 or 19, wherein  
said last named computers simultaneously start and stop the  
transmission of their user specific signals to their associated  
output devices.

21. A method of communicating data to a multiplicity  
of receiver stations, each of which includes a computer adapted  
to generate and transmit user specific signals to one or more

associated output devices, with at least some of said computers being programmed to process modification control signals so as to modify the user specific signals transmitted to their associated output devices, each of said computers being programmed to accommodate a special user application, comprising the steps of:

1 transmitting an instruct-to-process signal to said computers to cause each of said computers to process data in accordance with its associated special user application,

2 transmitting an instruct-to-output signal to said computers at a time when the corresponding user specific information is not being transmitted to an output device,

3 detecting the presence of said instruct-to-output signal at selected receiver stations and coupling said instruct-to-output signal to the computers associated with said selected stations, and

4 causing said last named computers simultaneously to output their user specific signals to their associated output devices in response to said instruct-to-output signal, thereby to transmit to the selected output devices an output signal comprising said data and said related user specific signals, the output signals at a multiplicity of said output devices being different, with each output signal <sup>specific</sup> ~~unique~~ to a specific user.

5. A method according to claim 4, further including the step of transmitting a modification control signal to the computers which are programmed to process modification control

C/Conrad  
signals, and causing said last named computers to modify their respective user specific signals in response thereto.

REMARKS

Claims 18-22 are in this application. Reconsideration of the rejection of these claims as being unpatentable over Girault in view of Crosby under 35 U.S.C. 103 is respectfully requested.

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P  
N  
K  
In its broadest concept, this invention generates and outputs (displays) information specific to each of a multiplicity of subscribers (with no other subscriber having access to the information), the user specific information being coordinated with program material transmitted to all subscribers. In the "Wall Street Week" example, in the course of a program broadcast to all subscribers, each subscriber's computer may interact with the broadcast material in such a way as to present to that subscriber information relating to that subscriber's stock portfolio at a particular point in the program. Thus, conceptually, there is a program "broadcast" to all computers, each computer is programmed to process information specific to a subscriber, and each computer is caused to display that information at a time coordinated with the presentation of the program material to all subscribers.

In this application, applicant seeks to obtain claims of sufficient breadth to cover presentations other than television presentations, for example, radio and hard copy; however,

the principle remains the same and the concept clearly is not disclosed in the prior art.

The Examiner has combined Girault, et al and Crosby, asserting that it would be obvious to employ Girault's system with a multiplicity of receivers in view of Crosby. However, Girault does not disclose the essence of applicants' invention and, therefore, whether or not there were a multiplicity of systems as disclosed by Girault, applicants' claimed invention would not result.

Girault discloses a system for displaying a moving map and aerial navigation data on an electronic screen. Such data clearly is user specific but, even if there were a multiplicity of such receivers, unlike applicants' claimed invention, the information presented at the individual receivers would not be coordinated with the contents of a program transmitted to all receivers. Furthermore, and equally important, in Girault the aerial navigation data displayed is information recorded in memory 17 which "may take the simple form of a magnetic-tape cassette or a semiconductor store, for example" (column 3, lines 35-39). This means that at each receiver station, the video display is merely a display of information stored in a computer. In contrast, in applicants' system, at each subscriber station the computer is programmed to process information specific to the subscriber and then to output (display) that information for that subscriber only.

Thus, comparing Girault (with or without Crosby) to applicants' system, in Girault there is no coordination of a multiplicity of computers with a generally broadcast program and there is no ability to cause the individual computers to process information specific to the individual subscribers.

Accordingly, claim 18 distinguishes over the cited art in requiring the transmission of an instruct to transmit signal to all of the computers in the system, which means that all computers are under a common control, and then causing the computers to generate and transmit their user specific signals to their associated output devices.

Claim 19 is further distinguishable because it requires that a modification control signal be transmitted to the computers to cause the associated computers "to modify their respective user specific signals". Clearly, this concept is alien to Girault (or Crosby), and indeed is counter to the teachings of Girault, wherein each computer must be pre-programmed with navigational data representing an area of interest which cannot be variable.

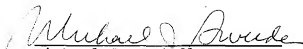
It is unclear to applicant how the Examiner proposes to apply Crosby which has been discussed at length in the parent application. Crosby discloses the actuation of a recorder for the purpose of recording information that already exists. The concept of generating user specific information at a multiplicity of computer stations is not disclosed.

Claims 21 and 22 are more specific to the data processing feature of applicants' invention and the coordination of the user specific information with the general program material. These claims emphasize another feature of the invention.

As explained above, in applicants' invention, each of a multiplicity of computers is controlled by instructions from one central control site and caused to generate and transmit information specific to a single user coordinated with the program material from the central site. This means that each of a multiplicity of separate jobs must be processed simultaneously and, in effect, outputted simultaneously to a multiplicity of subscribers. When the invention is used to display video material (for example), it is necessary that each subscriber transmit the video overlay information in the same predetermined time interval so that it will appear in the proper position on each subscriber's video screen. Thus, each subscriber's computer must process the user specific information and output the information simultaneously. Claim 21, which is similar to claim 18, specifically calls for the transmission of an instruct-to-process signal and an instruct-to-output signal to the computers. The instruct-to-process signal causes each computer to process the user specific information in accordance with its program (e.g., to calculate a user's stock portfolio), and the instruct-to-output signal causes each computer simultaneously to transmit the processed information to the output device under control of the central control site.

For the foregoing reasons, applicants respectfully submit that claims 18-22 clearly distinguish patentably over Girault and Crosby, taken individually or in combination. The concept of controlling a multiplicity of computers each separately programmed for a specific user and causing each computer to separately output its user specific information, all under control of a central control site is not disclosed or suggested in the prior art. Accordingly, early allowance of these claims is respectfully requested.

Respectfully submitted.

  
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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

JOHN C. HARVEY ET AL.

Group Art Unit 222

Serial No. 829,531

Examiner: S. Cangialosi

Filed: February 14, 1986

Notice of Allowance Date:  
04/03/87

For: SIGNAL PROCESSING APPARATUS  
AND METHOD

Batch No. W82

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AMENDMENT UNDER RULE 312

Hon. Commissioner of Patents and Trademarks

Washington, D.C. 20231

Sir:

Pursuant to the provisions of Rule 312, please amend  
the above-referenced application as follows:

In the Claims:

~~Claim 18, penultimate line, change "unique" to --  
specific--;~~

~~Claim 21, last line, change "unique" to --specific--.~~

REMARKS

The foregoing amendments are proposed to correct an  
inadvertent oversight and to make the claims internally consis-  
tent. The language which applicants propose to amend in claims  
18 and 21 state that each output signal is "unqie to a specific  
user". However, the preamble of each claim refers to "user  
specific signals" and the crux of the invention lies in the  
ability to output signals that are specific (not necessarily

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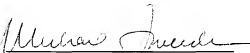
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"unique" to specific users (subscribers). In other words, it is the fact that the outputs relate specifically to a given user that is important, not whether or not the outputs are "unique". The term "unique" may imply that each output is different which, as was explained in the parent application, is not necessarily the case so long as the outputs are specific to the individual users.

The foregoing error was noticed only recently.

Applicants submit that the proposed amendment is proper in accordance with the provisions of Rule 312 since it involves no change in scope and merely clarifies a term which, possibly, may be misdescriptive.

Respectfully submitted,

  
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